

## CLAIMS:

1. Method for determining at least one write strategy, using a write strategy model comprising first and second parameters, for recording data on a medium comprising the steps:
  - providing at least one set of randomised first parameters, (step 202),
  - 5 - writing a data pattern by using said at least one set of first randomised parameters, (102, 106, step 204),
  - reading the recorded data pattern, (108, step 206), and
  - calculating a set of second parameters, (112, 114, step 208), based on said read pattern (110) and based on the at least one set of first randomised parameters (102),
  - 10 for enabling recording data on said medium, in an optimised manner.
2. Method for determining at least one write strategy according to claim 1, further comprising the steps:
  - providing the set of calculated second parameters, (114), and
  - 15 - calculating at least one set of first parameters, (120, 116, step 210), based on the set of second parameters, (114) and the data to be recorded (118).
3. Method according to claim 2, further comprising the step:
  - recording data in at least one storage location, (step 212), based on the sets of
  - 20 calculated first and second parameters, (114, 120) and the data to be recorded (118).
4. Method according to claim 1, in which the parameters in the set of first parameters (102, 120), are write strategy parameters.
- 25 5. Method according to claim 1, in which the write strategy parameters (102, 120), at least relate to write power levels.
6. Method according to any one of claims 1, in which the parameters in the set of second parameters, (114), are strategy model parameters.

7. Method according to claim 1, in which the parameters in the set of second parameters, (114), are related to the read out level, (110), of the at least one storage location and the write power levels used, (102).
- 5 8. Method according to claim 7, in which the read out level, (110), of the at least one storage location is linearly dependent on the write power levels used, (102).
9. Method according to any one of claims 1, in which the determining of the at  
10 least one write strategy is an optimization.
10. Method according to claim 1, wherein the model is based on an influence on a certain storage location from processing neighbouring storage locations.
- 15 11. Method according to claim 10, wherein the write power level for storing data at a certain location is dependent on the write power levels used for neighbouring storage locations.
12. Method according to claim 10, wherein the write power level for storing data  
20 at a certain location is dependent on the read out level at neighbouring storage locations.
13. A method for recording data on a recording medium, utilising a write strategy model using first, (102, 120), and second parameters, (114), comprising:
- providing the set of second parameters, where the set of second parameters  
25 (114), has been obtained by writing a data pattern (106, step 204) by using at least one set of randomised first parameters, (102, step 202), reading the recorded data pattern, (108, step 206), and calculating the set of second parameters (114) based on said read pattern, (110, step 208),
  - calculating at least one set of first parameters, (116, step 210), dependent on  
30 the set of second parameters, (114), and the data to be recorded, (118), and recording data (122, step 212), in at least one storage location, based the sets of calculated first, (120), and second parameters, (114), and the data to be recorded.

14. A recording medium, (52, 312, 412), having at least one data block, (314, 414), written in at least one storage location area on said medium, (52, 312, 412), said at least one data block, (314, 414), comprising a data pattern that has been written by using a method utilising a write strategy model comprising first, (102, 120), and second parameters, (114), wherein at least one set of first parameters, (102), is randomised, such that the recorded data pattern, (110), can be read, (108), and the set of second parameters, (114), can be calculated, (112), based on said read pattern, (110).
15. Write strategy determining device, for recording data, (step 212), on a recording medium, (52, 312, 412), comprising:
- a control unit, (304), arranged to provide at least one set of randomised first parameters, (102),
  - a writing unit, (310), connected to the control unit, (304), arranged to write a data pattern, (106), on said recording medium, (52, 312, 412), by using said at least one set of first randomised parameters, (102),
  - a reading unit, (316), connected to the control unit, (304), arranged to read said recorded data pattern, (108, 110), from said recording medium, (52, 312, 412), wherein said control unit, (304), further is arranged to calculate, (112), a set of second parameters, (114), based on said read pattern, (110), and based on the at least one set of randomised first parameters, (102).
16. Recording device, for recording data (step 212), on a recording medium, (52, 312, 412), utilising a write strategy model using first, (120), and second parameters, (114), comprising:
- a control unit, (406), arranged to provide a set of second parameters, (114), where the set of second parameters (114), has been obtained by writing a data pattern (step 204, 106) by using at least one set of randomised first parameters, (102), reading (step 206, 108), the recorded data pattern (110), and calculating (step 208, 112), the set of second parameters, (114), based on said read pattern, (110), and arranged to calculate (step 210, 116), at least one set of first parameters, (120), dependent on the set of calculated second parameters, (114), and the data to be recorded, (118), and
  - a writing unit, (410), connected to the control unit, (406), arranged to record data, (step 212, 122), in at least one storage location on said recording medium, (52, 312,

412), based on the sets of calculated first, (120), and second parameters, (114), and the data to be recorded, (118).